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Including multiple languages in secondary education: A translanguaging approach

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Abstract: This article presents recent developments around multilingual secondary education in the officially bilingual province of Friesland, the Netherlands. As in other European contexts, schools in this region face the challenge of a growing language diversity due to migration. Despite this larger variety of languages in society, schooling is still mainly through the national language (Kroon & Spotti, 2011), based on the idea that immersion in each of the target languages triggers the best outcomes, thus leading to language separation pedagogies. Also, in teacher training programmes, pre-service teachers are educated with a pedagogy of language separation. This is in contrast with research that has repeatedly shown the importance of using all language resources of multilingual pupils in optimizing learning (Cenoz & Gorter, 2011; Cummins, 2008).

Against this backdrop, recent developments for multilingual secondary education within the province of Friesland focus on

- a. less separation between the three instruction languages (Frisian, Dutch and English);
- b. creating bridges between foreign languages in secondary education (German and French);
- c. valorising and including migrant languages in mainstream education.

The Holi-Frysk project (holistic approach for Frisian and language education) was set up as an answer to these issues (Authors, forthcoming). In this pilot-project three secondary schools of different types developed, implemented and evaluated multilingual teaching approaches to include all languages present in the school in teaching. Teachers were trained through workshops and school visits and the

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activities were video recorded, transcribed and analysed on their translanguaging practices.

The article will first of all present and discuss a few examples of the pedagogical activities and secondly zoom in on its effects at the interactional level by focusing on moments in which different functions of pedagogical translanguaging (García & Wei, 2015) appear. Finally, suggestions are given how these findings could be integrated in the teacher training programmes to prepare our pre-service teachers for today's multilingual and multicultural classrooms.

Keywords: multilingualism, multilingual education, translanguaging, holistic approach, secondary education

1 Introduction

In most European schools, classrooms no longer solely consist of students who speak the same language(s) at home as the one used at school, which is often a national language. A growing number of pupils speak family languages, a regional minority language or even dialects and varieties of these languages (Aronin & Hufeisen, 2009; Duarte & Günther-van der Meij, 2018a). Furthermore, there is an increase in foreign language teaching in Europe, both in terms of the number of languages students learn at school and in terms of the years of schooling in those languages (Smith & McLelland, 2018). According to the Eurostat, 96 % of all European students learn English in secondary and three fifths in upper secondary education learn a second and even a third foreign language (Eurostat, 2017). This growingly complex language ecology (García, Seltzer & Witt, 2018) poses several challenges for language education in European schools (Scaglione & Caruana, 2018). The region described in the current article is an example of such a linguistically and culturally diverse area. In the officially bilingual province of Friesland in the Netherlands, 55 % of the population is bilingual in Dutch and the Frisian regional minority language (Provincie Fryslân, 2015) and about 15 % has a migrant background such as Polish, Arabic or Tigrinya (Duarte & Günther-van der Meij, 2018a). During secondary education, most pupils learn English and French or German as foreign languages.

While there is rising evidence for the relevance of fostering students' home language(s) both for cognitive and socio-emotional development but also for school attainment (Cenoz, 2013; Cummins, 2008; Sierens & Van Avermaet, 2014), many schools, often unreflectively, continue using monolingual teaching approaches mostly focusing on fostering national languages (Kroon & Spotti, 2011) and thus often ignoring the linguistic and cultural diversity of their pupils (Duarte

& Gogolin, 2013). The problem with this approach is that they contribute to the achievement gap between pupils with and without an immigration background as pupils with an immigration background struggle with insufficient proficiency levels in the instruction language (OECD, 2016). This monolingual teaching approach contradicts research findings on the inclusion of home languages in mainstream education, which suggests that including home languages will enrich pupils' academic learning (García & Flores, 2012; Sierens & Van Avermaet, 2014). One of the fears of teachers is they will lose control over the classroom when they allow home languages into the classroom and that pupils will use their home languages for non-educational related practices (Jordens, 2016; Rosiers, 2016; Van Praag, Agirdag, Van Avermaet, & Van Houtte, 2017). However, research suggests that students use home languages merely to discuss certain classroom issues, such as the content and progress of a task (Bührig & Duarte, 2014; Duarte, 2016; Jordens, 2016; Rosiers, 2016; Van Praag, Agirdag, Van Avermaet, & Van Houtte, 2017; Hajer & Spee, 2017; Le Pichon-Vorstman & Kambel, 2017).

Based on the idea that students' diverse linguistic knowledge can actively be used as resource for learning, a recent trend regarding language education has been termed the *multilingual turn in language education* (Conteh & Meier, 2014). Similarly, Flores and Baetens-Beardsmore (2015) describe the benefits of heteroglossic models in which minority and migrant languages are incorporated in instruction. Cenoz and Gorter (2011, 2015) refer to the *Focus on Multilingualism* approach in which the natural multilingual practices of pupils are closely related to the ways in which languages are taught. Presently though, the theoretical development of teaching approaches that use pupils' multilingual competences is more advanced than empirical research on the implementation and effectiveness of such models (Herzog-Punzenberger, Le Pichon-Vorstman, & Siarova, 2017). This is especially true for secondary education, although some recent research within the European Centre for Modern Languages has developed descriptors for multilingual approaches (Candelier, 2010) and curricular methods for whole-school language approaches (Allgäuer-Hackl, Brogan, Henning, Hufeisen, & Schlabach, 2018).

There is thus a growing need for a change towards multilingual teaching approaches, specifically for secondary education. Yet, many teachers are still reluctant to:

- a) include migrant languages in mainstream education (Pulinx, Van Avermaet, & Agirdag, 2017);
- b) reduce language separation ideologies towards whole-school language approaches (Cummins, 2008), frequently based on the idea that each language is best learned through immersion and thus in isolation from the others.

The achievement gap is also an issue of concern in the Dutch context. A study by Schnepf (2007) showed that a considerable part of immigrants' low educational achievement could not be explained by their family background when compared to non-immigrants. Although not much research has been conducted on this issue in the Frisian context, a similar gap has been found for those with a minority Frisian background (De Boer, 2009). Furthermore, in teacher training education languages are offered separately, through a monolingual ideology (Duarte & Günther-van der Meij, 2018a). This article focuses on presenting the recent developments in the bilingual province of Friesland in the north of the Netherlands where secondary education struggles to fit in a minority (Frisian), majority (Dutch) and different foreign languages (English, German, French, Spanish) together with different migrant languages (e.g. Polish, Arabic, Tigrinya) in the curriculum. The article aims at tackling multilingualism and language education in secondary schools through presenting results from the Holi-Frysk project (A holistic approach towards Frisian in secondary language education; www.holi-frysk.nl). This research project served as a pilot-intervention and used a design-based approach (Cobb et al., 2003; McKenney & Reeves, 2013) to develop, implement and evaluate multilingual teaching activities and materials for all languages present in the school. The teaching activities were developed in a co-construction between participating teachers of three secondary schools and the Holi-Frysk research team. The activities were based on a holistic model for multilingualism in education (Duarte, 2017; Duarte & Günther-van der Meij, 2018b; Günther-van der Meij & Duarte, forthcoming). In terms of secondary education, the model is innovative in that it provides a framework to acknowledge and use foreign, national, regional minority and migrant languages within mainstream classes. In this article we aim at:

1. presenting examples of pedagogical multilingual activities that were developed within the project;
2. zoom in on its effects at the interactional level by focusing on moments in which different functions of pedagogical translanguaging (García & Wei, 2015) appear;
3. the possible implications of the intervention for language teaching within teacher training programmes.

2 Multilingualism in secondary education

At the foundation of multilingual education is the idea that language skills are transferable across languages (Cenoz & Gorter, 2015; Cummins, 2008; Duarte & Gogolin, 2013) and thus languages are best learnt in relation to each other. According to the interdependence hypothesis (Cummins, 1979), languages share an

underlying cognitive proficiency, which enables learners to use principles learnt in one language for acquiring another language (Cummins, 2007; Nortier, 2009). Recent research on strong bi- and trilingual school models has offered evidence for the potentials of using cross-linguistic transfer for raising academic achievement (Beetsma, 2002; Duarte, 2011; Duarte & Pereira, 2011; Francis & Lesaux, 2006; Rolstad, Mahoney, & Glass, 2005). Furthermore, mainstream schools which use multilingualism as a resource for learning have yielded positive academic results for all participating pupils (Bourne, 2013; Bührig & Duarte, 2014; Creese & Blackledge, 2010; Dirim, 1998; Gogolin & Neumann, 1997; Moodley, 2007; Rolff, 2006). As such, a well-developed home language can make the acquisition of another language more successful (Coelho, 2012; Garconius, 2014), while it also contributes to the ability to communicate with family members, making the home language an important part of a student's (cultural) identity (Coelho, 2012). Research also has shown that applying multilingual teaching methods has no negative effect on achievement in the majority language (Cummins, 1979; Slembrouck, Van Avermaet, & Van Gorp, 2018).

However, teachers often struggle with the practical implementation of multilingual approaches not only due to language separation ideologies (Pulinx et al., 2017) but also due to the current fragmentation of approaches for multilingual education. While several pedagogical possibilities are available, teachers are not always aware of the differences between them, both regarding objectives and implementation. In the following an overview of such approaches will be provided and combined into our holistic model for multilingualism in education.

2.1 Holistic multilingual education

The increase of multilingual pupils and the raising awareness towards their competences and needs has led to research on dynamic models of multilingual education (Cenoz, 2009; Duarte, 2018; Hobbs, 2012) in which all language learning is embraced (e.g. home language(s), language/s of schooling, foreign languages, regional and minority languages). A common feature within multilingual education is the active inclusion of several languages in instruction. Several pedagogical approaches have been put forward in order to include multiple languages in mainstream instruction, such as Content and Language Integrated Learning (CLIL), immersion and language awareness. Several approaches to include multiple languages in mainstream education are available and have produced positive academic, attitudinal and socio-affective results for all pupils involved. Still, "it appears that the most important challenge is not so much a lack of evidence-based strategies in highly diverse classrooms – although clearly more research is

needed – but rather the availability of this knowledge and the need for a shift in attitudes of those who work with highly diverse classrooms on a daily basis, teachers, educators and policy-makers” (Herzog-Punzenberger et al., 2017, p. 33). As a result, the focus of research should be on finding ways to facilitate available knowledge for sustainable implementations.

Taking on a teacher professionalization perspective, we have developed a holistic model for multilingualism in education in order to address the needs of secondary schools within the official bilingual region of Friesland, in the North of the Netherlands (Duarte, 2017; Duarte & Günther-van der Meij, 2018b; Günther-van der Meij & Duarte, forthcoming), based on the work of Cenoz (2009) and Cummins (2008). The holistic model for multilingualism in education (Figure 1) allows a combination of the knowledge and teaching approaches that have proven effective in education of both minority and migrant pupils into one model and is thus appropriate for different school types. In addition, it combines different approaches towards multilingual education, by placing them along a continuum that oscillates between the acknowledgement of different languages and their use in instruction.

Figure 1: Holistic model for multilingualism in education (Duarte, 2017; Duarte & Günther-van der Meij, 2018b; Günther-van der Meij & Duarte, forthcoming)

The model consists of five approaches from a functional multilingual learning (FML) perspective (Slembrouck, Van Avermaet & Van Gorp, 2018). With FML multilingualism can be turned “into a powerful didactic tool” (Slembrouck, Van Avermaet & Van Gorp, 2018, p. 18). It aims at treating all languages and language varieties that children bring to school “as didactic capital which can be invested in real-time learning processes, so as to increase children’s chances of development and education” (Slembrouck, Van Avermaet & Van Gorp, 2018, p. 18). From

FML the model is divided in the following five approaches: language awareness, language comparison, receptive multilingualism, CLIL and immersion. A language awareness approach (Candelier, 2010) is used to explore knowledge about languages and language diversity but not typical proficiency knowledge in the language. To create bridges between the several languages, contrastive language teaching through explicit language comparison is used (Gentner, 2010; Rittle-Johnson & Star, 2011). This creates meta-linguistic knowledge about differences and similarities in typologically related languages but, at a different level, also in typologically divergent languages (Ziegler & Stern, 2014). With the aim of raising receptive skills and developing language learning strategies, receptive multilingualism, which is a form of asymmetrical communication in which each speaker speaks a different language while trying to understand the other (Braunmüller, 2013; ten Thije & Zeevaert, 2007), is used. This works well with related languages. Content and Language Integrated Learning (CLIL) is used to teach subject content in different languages and immersion is used to teach the different languages by using them in instruction. Finally, knowledge of translanguaging-based pedagogies is used in each of the five approaches, in which several languages are used simultaneously in instruction. Translanguaging refers to the use of the learner's full language repertoire in teaching and learning (García & Wei, 2015).

The holistic model for multilingualism in education supports teachers in distinguishing between what they can do with languages that they speak themselves but also maps the possibilities for them to engage with languages which they do not share with their pupils. A more detailed description of the original model can be found in Duarte & Günther-van der Meij (2018b) and more information on the revised version of the model, that includes FML, can be found in Günther-van der Meij & Duarte (forthcoming).

2.2 Multilingual interaction in classroom settings

Regardless of the teaching approach adopted, classroom interaction is, in fact, often bi- or multilingual. Bono and Melo-Pfeifer (2011) showed that in different educational settings, students use languages to fulfil different functions and in- or exclude languages for different reasons. Equally, teachers' use of languages to accomplish different pedagogical functions also sends a message to students regarding the status of languages (Flores & Baetens-Beardsmore, 2015). Several studies have looked at language use in educational settings. For example, in primary schools in the Basque country, a pedagogical intervention using a translanguaging approach has been positively received by the teachers (Leonet, Cenoz, & Gorter, 2017). The Basque teachers acknowledged the translanguaging pedago-

gies as a way of developing students' metalinguistic awareness, but also thought that Basque should be reinforced more than English and Spanish, as pupils did not use the minority language frequently enough in spontaneous communication.

In order to study classroom practices in more detail, video analysis has been extensively used across all educational levels (Bührig & Duarte, 2014; Duarte, 2016; Duarte, Gogolin, & Siemon, 2013). De Jong (2015) used video observations to study target language use and didactic approaches of caretakers in Dutch bilingual kindergartens. This study found no relationship between the amount of target language use by the teacher and by the children, nor between the amount of feedback the caretaker provided and children's target language use. Yet, motivating the children and letting them do exercises was found to have a positive effect on the target language use by the children. In two of the six lessons, a translanguaging approach was used. The effects of using translanguaging on children's target language use remained unclear, but the caretakers were found to switch to the children's home language, Dutch, when: (a) a child answered or made a spontaneous comment in Dutch; (b) an utterance concerned a child personally; (c) metalinguistic comments were made; (d) translating words and sentences (De Jong, 2015). This pattern shows that teachers used translanguaging to make sure the children understood the situation and to ensure safety and emotional stability.

In Belgium, the Validiv project used video observations to study language practices in primary schools (Rosiers, 2016). In a pull-out setting in which students were encouraged to use their home languages, bilingual Dutch-Turkish pupils did use Turkish more than Dutch for peer-related issues, however, the vast majority of the time students used both Turkish and Dutch for school-related talk. Rosiers (2016) further found that translanguaging occurred spontaneously among the students. They used this strategy when it was easier to retrieve the word in another language, or to display their knowledge. Teachers empowered the students by addressing their identities, but when the school policy was stricter in its use of only one language this was done more covertly.

Another video study in primary education is described by Muller and Baetens-Beardsmore (2004), who studied the so-called European Hours in the European School in Brussels. During these hours, children from different linguistic sections are stimulated to interact with each other while they are allowed to speak any language they want to. The study showed that the teacher made use of code-switching and asked the students for help when she did not know a word. This kind of behaviour stimulated students to speak their weaker language(s) as well, since they saw that asking for help is not a problem. When necessary, students acted as interpreters, therefore there was never a complete breakdown of communication (Muller & Beardsmore, 2004).

Analysing multilingual language practices is particularly relevant in secondary education as pupils are developing and applying more cognitive and learning strategies. In the LiVis study in Germany aimed at investigating multilingual interaction in secondary education (Bührig & Duarte, 2014; Duarte, Gogolin, & Siemon, 2013) audio material from recording devices worn by each of the 51 students, was used together with the video material from three cameras in the classroom. This complex design was implemented in order to include interactions between students (with or without teacher) not only in the official classroom discourse, recorded by the cameras, but also in other interaction forms such as small groups and pairs. The first results confirm the existence of a monolingual habitus in German secondary education, since approximately 96 % of all recorded communication was in German, with only 4 % in another language or a mix of languages (Duarte et al., 2013). Pupils were found to use translanguaging to engage in high quality exploratory talk, while they scaffolded meaning through interaction and jointly solved tasks (Duarte, 2016). Different functions of this use of translanguaging were identified, such as paraphrasing the task and taking care of managerial issues when trying to understand the task (Duarte, 2016). When students were solving a task together, translanguaging was for example used to recast and correct information, negotiate meaning, display agreement or disagreement and discuss suitable wording. Interestingly, students who used translanguaging did not differ from students who solely used German regarding their on- and off-task behaviour, confirming the results of other studies which found that students do not use other languages only to talk about private topics. Regarding the teachers' language use, 99.2 % of their communication when addressing the whole class was in German, again confirming the existence of a monolingual habitus (Duarte et al., 2013).

Marawu (2018) focused on the different functions languages can have when used by teachers. His study in a bilingual secondary classroom in South Africa showed that teachers used translanguaging from English to students' home language for several reasons. These reasons were: (a) to intensify and reformulate what had been said in English; (b) to structure the discourse; (c) to facilitate learning by enhancing students' understanding of the content (Marawu, 2018). Furthermore, the research revealed different pedagogical functions for switching to students' home language(s): (a) emphasis and elaboration; (b) repeating and reinforcing information presented in English; (c) encouraging learners to value their home language tongue as an important educational resource; (d) reformulating to summarize explanations in English and to ensure the students understand the lesson.

2.3 Focus and research questions

While several approaches for multilingual secondary education are currently available, their fragmentation and the lack of knowledge of the teachers are an obstacle for their implementation. For this reason, a holistic model for multilingualism in education was developed and implemented in three secondary schools in the Netherlands. Most studies that have used video analysis to look into multilingual classroom practices: a) have focused on primary education; b) only included one additional language to the instruction language; c) looked at bilingual education settings. In contrast to this, our study aimed at the language practices of teachers in Dutch mainstream secondary education, while focusing on different types of languages and observing teachers from different school types.

As the holistic model for multilingualism in education is still being empirically tested (Duarte & Günther-van der Meij, 2018b; Günther-van der Meij & Duarte, forthcoming), the central research question for the current paper concerns the development and implementation of the intervention. The focus will be on presenting the one-year pilot project Holi-Frysk during which the model was tested with three secondary schools in the official bilingual region of Friesland, in the North of the Netherlands. Hence, the research questions for the current paper are:

- RQ1: What features of the holistic model for multilingualism in education are implemented by teachers in their didactical interventions?
- RQ2: What kinds of pedagogical functions can be found at the interactional level as a result of the holistic multilingual approach?
- RQ3: What are the possible implications of the results of the intervention for language teaching at the teacher training programmes?

To answer RQ1, examples of teaching activities and materials developed within the project will be presented and discussed in relation to the above discussed model. To answer RQ2, transcriptions of videographic classroom observations in which several languages are used simultaneously are used to illustrate the different functions used and the different languages the teachers use in these functions. They thus show how teachers can plan and implement a multilingual teaching approach but also how they spontaneously can include several languages in interaction. To answer RQ3, data from interviews and questionnaires on experiences with the project, held with teachers and pre-service teachers that participated within the project are used.

3 Methodology

The current research is set within a mixed-methods intervention study (Nastasi et al., 2007) with a pre-post-design in which the development and implementation of a holistic approach for multilingual secondary education was monitored using surveys, interviews with teachers, questionnaires with pre-service teachers and video analysis of 21.5 hours of lessons. Videography was applied to study the pedagogical functions of the developed multilingual approach at the interactional level. Although the analysis of the video-data and the experiences of the participating teachers and pre-service teachers is the main focus of the current paper, the larger research project within which it was set will first be presented in the section below.

3.1 The Holi-Frysk project

The Holi-Frysk project was a pilot study (2017–2018) which focused on multilingualism in mainstream secondary education from a holistic perspective (Duarte, 2017, Duarte & Günther-van der Meij, 2018a). Within the Holi-Frysk project an intervention for holistic multilingual education was implemented in three secondary schools in the province of Friesland (Duarte, 2017; Duarte & Günther-van der Meij, 2018b; Günther-van der Meij & Duarte, forthcoming) of different types: a trilingual Frisian-Dutch-English school, a mainstream school with the main instruction language Dutch and a newcomer school. The project aimed to develop multilingual teaching approaches and materials for different types of secondary schools and to investigate their implementation and its effects on language attitudes of teachers and on classroom interaction. Using a design-based research (DBR) approach teaching activities and materials (Cobb et al., 2003; McKenney & Reeves, 2013), were developed, implemented and evaluated in co-construction between teachers and the research team. The developed activities were based on the holistic model for multilingualism education (Figure 1) that combines different multilingual teaching approaches and encourages the use of foreign, national, regional minority and migrant languages. In order to assure co-creation of the developed activities, regular school visits were conducted in the first six months of the project, as well as three workshops in the course of the project's year. During these moments, experiments were discussed and evaluated by all participants, in order to optimize results.

3.2 Participants

A total of 3 schools, 8 teachers of different subjects and 186 pupils took part in the project. Schools were approached by phone and mail and participation was voluntary. Table 1 provides an overview of the schools and teachers in our sample. Each of the three schools is of a different specific school type representative of this official bilingual region. School R is located in a village in the province of Friesland that hosts refugees and asylum-seekers and focuses on raising their levels of Dutch as an additional language. School C is a mainstream secondary school in the capital of the province of Friesland offering the two highest academic tracks (*higher general secondary education: HAVO* and *pre-university secondary education: VWO*). It has mainly Dutch home language speaking pupils and Frisian as a school subject for grades 1 (compulsory) and grades 4 to 6 (optional). The school also offers English, French and German in almost all grades. School D is situated in a medium-sized city in the province of Friesland and offers a trilingual academic track with Frisian, Dutch and English and has both Dutch- and Frisian-speaking pupils. French and German are also school subjects in almost all grades. At least two teachers of each school were asked to participate in the research team to develop multilingual activities in line with a translanguaging-based inclusive pedagogy. Preferably the participating teachers per school were a combination of a language and a content subject teacher. The teachers were prepared for their participation in the project through regular school visits and workshop sessions with the research team. The developed multilingual activities were inspired by the FREPA (Framework of Reference for Pluralistic Approaches to Languages and Cultures (Candelier, 2010)). The activities fitted in as much as possible with the curriculum and lesson plans of the running school year.

Table 1: Sample of participating schools, teachers and pupils in the study.

Teacher	School	Age	Gender	Subject	Nr of stds (N=186)	Mother tongue	Years of experience
(N=7)	(N=3)						
R1	R	50-65	Male	Mathematics	28	Dutch; Fri- sian	< 5
R2	R	35-50	Female	Dutch	14	Dutch	5-20
R3	R	20-35	Female	All (teaching assistant)	14	Dutch	< 5
C1	C	20-35	Female	Frisian	60	Frisian	< 5
C2	C	50-65	Male	Frisian	20	Frisian	35-50
D1	D	50-65	Male	English	25	Frisian	35-50
D2	D	20-35	Female	Frisian	25	Frisian	5-20

3.3 Procedures and instruments

During the second half of the project, the experiments developed within the first half were implemented and evaluated by each teacher and optimized in cooperation with the research team. This process was accompanied by classroom observations conducted with an adapted version of the Communicative Orientation of Language Teaching (COLT) Observation Scheme (Spada & Fröhlich, 1995). The scheme consisted of two parts. The first part provided information about the lesson analysed (such as school, subject and date), the number of students, the content and materials of the lesson. The second part consisted of a table for classroom observation with information about the actors involved in the activity or episode, the organization, the languages used, the multilingual method used, the language of the teacher’s feedback and how language shift took place. Lastly, the observed lessons were also recorded using a one-camera design. Before all observations started, a pilot observation was conducted in a lesson which did not include an activity developed within the Holi-Frysk project. This was done to get the observers acquainted with the camera and the observation scheme. Due to privacy issues, the camera was focused on the teacher as much as possible and less on the students. Table 2 shows the sample of lessons that was observed. In total, 21,5 hours of teaching were observed.

Table 2: Observation sample.

School	Teacher	Subject	Activity (and lesson)	Total duration (N = 1290)	Students
R	R1	Mathematics	Listen carefully to me	3x60 + 1x30 minutes (210 minutes)	between 6 and 13
R	R2&R3	Dutch	Linguistic landscape	4x60 minutes (240 minutes)	14
R	R1	Mathematics	Find the way	3x60 + 1x30 minutes (210 minutes)	between 7 and 12
C	C1	Frisian	Dialects	3x60 minutes x 3 classes (540 minutes)	between 15 and 28 per class
D	D1	Frisian	Dialects	2x45 minutes (90 minutes)	20

3.4 Data analyses

The preliminary coding scheme of pedagogical functions attributed to the use of several languages in classroom interaction was based on García and Wei's (2015) functions of pedagogical translanguaging and was adapted during an initial qualitative analysis of the data. Using these categories, a first quantitative coding of the whole dataset was done to identify instances of multilingual language use and to attribute pedagogical functions to the several languages used by the teachers. The observations were analysed using the ELAN (ELAN, 2018) software. ELAN was chosen because the software enables the user to create complex annotations on video and audio resources. To analyse the languages that were used, the following categories were coded: Dutch (the majority and main instruction language), Frisian (the regional minority language), foreign languages (such as English, German, French or Spanish) and home languages (other languages spoken by the students such as Polish or Arabic). As mentioned above, the language function categories were initially based on García and Wei (2015) but adapted to fit the data more appropriately during analysis. The following codes were used:

Table 3: Coding scheme for pedagogical functions when using several languages in interaction (based on García & Wei, 2015).

Function	Description
Attention and classroom management	Making sure students pay attention and are engaged in the activity and do the activity correctly and in the correct language, also practical comments/questions and providing students with tools to be able to do their work.
Comprehension	Adapting the instruction to different types of students and their levels, for example by translating, including the explanation of background knowledge so that students are able to understand the content.
Explanation	Explaining task or non-task related issues.
Feedback	Feedback to comments/questions or work of the students and to materials used in the lesson and asking the students for feedback.
Knowledge	Developing and extending new knowledge and critical thinking of the students and deepening their understandings and cognitive engagement.
Identity	Valuing students' identities and home languages and encouraging them to invest in these themselves.

Initially, translanguaging was added as a category as well. However, it was decided that translanguaging could not be analysed this specifically for separate utterances in a specific language. Instead, translanguaging was added as a separate level. When the teacher used more than one language this was seen as a translanguaging sequence and the function of this sequence was analysed using the categories described in table 3. All audible utterances by the teacher directed at the students were analysed, and for each utterance an annotation was made for the language which was used and the function with which the language was used. If the utterance was in a different language than the one used for the preceding utterance, an annotation for translanguaging was made which noted the function with which this other language was used. When the teacher continued to switch between languages, this was tagged as a translanguaging sequence with one function. Language switches were thus not analysed separately, but as a sequence, as the goal was not to investigate the function(s) of language switching per se, but of using multiple languages. An example of coding with ELAN (ELAN, 2018) is shown in Figure 2.

Figure 2: Screenshot of coding in ELAN.

Besides coding the use of different languages, transcription of the translanguageing sequences were added in ELAN. After a lesson was coded, the data was exported to an Excel file. The data was analysed as percentage of language and function for all lessons and teacher(s) per school.

4 Results

In the following, firstly two examples of multilingual activities that were developed within the project are presented with the school of showing how the holistic model for multilingualism in education was translated into classroom activities. Secondly, results from the analysis of video observations and transcriptions into the different functions of pedagogical translanguageing are discussed. Lastly, the implications for teacher training programmes, based on evaluations of experiences within the project from participating teachers and pre-service teachers is discussed.

4.1 Examples of multilingual activities

Example 1: Multilingual mathematics

For the school for newly arrived pupils, school R, an activity to learn mathematical concepts in Dutch by using the home languages was developed. As in other

languages, Dutch knows many different words for mathematical terms such as ‘adding up’ (e.g. *optellen*, *meer*, *samen*, *erbij*) and ‘subtracting’ (e.g. *aftrekken*, *minder*, *eraf*). In Dutch as a second language textbooks these terms are all used interchangeably, which can be quite confusing for new learners of the language, whilst they probably are already familiar with the concepts in their home languages (Cummins, 2000). In this activity pupils were first handed out the terms and symbols for the same mathematical concept on paper. They had to match them by walking around and finding their match amongst their classmates. E.g. one pupil would have the symbol ‘+’ and the other would have the term ‘plus’ and they had to find each other. The next step was to learn the Dutch expressions that are used for the concepts. For example, the word ‘vermenigvuldig’ (multiply) or ‘optellen’ (adding up) was cut up in three parts: prefix, root and suffix: ‘ver’ ‘menig’ ‘vuldig’ or ‘op’ ‘tel’ ‘len’. Again, pupils were given pieces of paper and had to find their match. The final step of this part of the activity was that pupils matched the terms, symbols and expressions. Again, one pupil would have the symbol ‘+’, another would have the term ‘plus’ and yet another the expressions ‘optellen’, ‘meer’ and ‘samen’ (adding up) and they had to group all terms, symbols and expressions that belonged to the same concept. The pupils then added the terms in their own languages to the symbols and Dutch terms and expressions and taught the teacher and each other the terms in their home languages. The activity ended with a group discussion on the differences and similarities of the word and symbols in the different languages.

As the activity was mostly conducted in Dutch it is an example of immersion. However, language comparison was also used in order to include the home languages of pupils and compare mathematical concepts in different languages. This was done both orally and written. The mathematical symbols and their correspondents in Dutch and the home languages were present in the class afterwards and were referred to on several future occasions (see Figures 3 and 4).

Figures 3 and 4: Multilingual mathematics in school R.

Example 2: To dialect, or not to dialect?

For the mainstream high school, a lesson about dialects was developed in which pupils had to explore different dialects in and outside the Province of Friesland and discuss their perception of dialects and of dialect speakers. The aim was to generate a reflection on language hierarchies and on language identity of dialect and minority language speakers. First, pupils played a quiz in which they had to

guess where different dialects are spoken, using audio recordings. A discussion followed in which the whole class gave their opinion on what the features of dialects are, where they are spoken, how many there are and how speakers view them. Next, the pupils formed groups of four and picked a dialect of their choice and had to prepare a presentation. In the presentation they had to discuss where the dialect was spoken, how many speakers it had, characteristics of the dialect (sounds, grammar, vocabulary, etc.) and present an audio sample and a short dialogue in the dialect featuring the characteristics. Presentations were given in Frisian, a foreign language for most of the pupils. The activity ended with a whole class discussion on which dialects the pupils liked best and how they thought dialect speakers might feel when they have to speak Standard Dutch or Standard Frisian.

The activity is primarily an example of language awareness due to its aim of developing awareness about local languages and dialects and discussing existing stereotypes in relation to dialect speakers. In addition, as it was conducted within the Frisian classes, it is also an example of immersion in the Frisian language for most of the pupils in the mainstream high school, who are native speakers of Dutch.

The two examples above have shown how the multilingual approaches from the holistic model for multilingualism in education were implemented in classroom practice, including migrant and minority languages. In the next section, the results of the analysis of the pedagogical functions of teacher talk in classroom interaction are discussed.

4.2 Pedagogical functions of teacher talk within multilingual education

In order to answer the second research question on the pedagogical functions at the interactional level as a result of the holistic multilingual approach, data from the video observations conducted at the three schools will be presented. The functions of the different languages were analysed per school, using the adapted version of the list of functions by García and Wei (2015). For each function two exemplary statements are shown in Table 4. All examples are provided with an English translation which is italicized. Language switches that appeared in the utterances are underlined.

Table 4: Exemplary Statements of the Function Categories

Function	Example	Example Statement	Teacher
Attention and classroom management	1	<u>Hé lieverds</u> , ja leave. <i>Hey darlings. Yes darling.</i>	C1
	2	<u>We gaan weer even terug eh naar de kern van het verhaal.</u> <i>We return eh to the heart of the story.</i>	C1
Comprehension	3	Dus rechtdoor rechtdoor. <u>Tuch elka tuch elka.</u> <i>So straight straight. Straight straight.</i>	R1
	4	...Skylge dat wie? Terschelling... ... <i>Skylge that was? Terschelling...</i>	D1
Explanation	5	<u>Ja zeker zeker ik verwacht dat verwacht ik zelfs want volgens mij bin ik de</u> ienige dy jim in hiel soad eh oare taal hearre lit. <i>Yes sure sure I expect I even expect that because I believe I am the only one</i> <i>that lets you hear an entirely different kind of language.</i>	C1
	6	No dan wol ik no graach even útlizze wat we hjoed dwaan gean en net allinnich hjoed mar de kommende trije lessen. <i>Well then now I want to just explain what we are going to do today and not</i> <i>just today but the next three lessons.</i>	C1
Feedback	7	<u>Yamin?</u> Dat lijkt heel veel op Tigrinya. Nou dan is bij jullie <u>sichiem</u> (segam) ofzo. <i>Right? That is very similar to Tigrinya. Well then you have something like left.</i>	R1
	8	Op in snein te middei <u>bij wijze van</u> in oerke riiden en dan bist in hiel ein. <i>On a Sunday afternoon in a manner of an hours drive en than you are quite far.</i>	D1
Knowledge	9	<u>Hoe giet it mei dy ja.</u> Nou de de de weg. <i>How are you yes. Well the the the way.</i>	R1
	10	Al hast dy taal net troch, dan kinst der wol foar kieze datst seist ehh... <u>moin hu hetst du?</u> Ja? <i>Even though you don't quite get the language, you can choice to say hi, what's</i> <i>your name? Yes?</i>	D1
Identity	11	Dus maar jullie taal is ook heel belangrijk hè. <i>So but your language is also very important right.</i>	R1

In the following, first, an overview is given of the different languages that were spoken in class by the teachers for each school. Then an overview is given of the part each of the different functions had in class for the three schools. Finally, two excerpts in which pedagogical translanguaging (García & Wei, 2015) was used by the teachers will be analysed in relation to the functions the different languages fulfil.

4.2.1 Languages used by teacher(s) per school

Figure 5 shows the different languages used by the teacher(s), which were analysed per school. All utterances by the teachers directed at the students were coded. No distinction was made between the teacher addressing the class as a whole, a smaller group or an individual student, nor between utterances related and unrelated to the task. Utterances by the teachers directed at the observers were excluded from analysis. Figure 5 clearly shows considerable differences be-

tween the three schools. The teachers at school R primarily used Dutch for their utterances. Only about 2% of the utterances were in Frisian or a foreign or home language. The teacher at school C used Frisian (52,6%) and Dutch (46,5%) both approximately half of the time in her utterances in class. Less than 1% of the time she used English in her utterances. The teacher at school D used almost exclusively Frisian in his utterances. Only 3,5% of the time he used Dutch in his utterances and just 0,11% of the time he used a foreign language (German and different Frisian varieties). Most differences in language can be explained by the subjects being taught by the different teachers. Frisian teachers used more Frisian, other teachers used more Dutch or English. Teachers using pupils' home languages (other than Frisian) occurred only in very few occasions.

Figure 5: Languages used by teacher(s) per school.

4.2.2 Pedagogical functions used by teacher(s) per school

Next, the different pedagogical functions used by the teachers in their utterances were analysed per school. The results are shown in Figure 6. In all three schools, feedback was the function used most frequently (between 33.1% and 38.0% of the time), followed by explanation (between 25.3% and 26.4%). Attention was used often by the teacher(s) at schools R and C (25.8% and 27.1% respectively) but not by the teacher at school D (6.8%) who made more use of Knowledge (25.0% against 2.5% and 5.3% for schools R and C respectively). Comprehension was used for 8.6% of the time for school R, 3.3% at school C and 10.1% at school

D. Identity was only used by the teachers at school R, for 0.7 % of the time, but not by schools C and D.

Figure 6: Language functions used by teacher(s) per school.

Although the percentage of other languages than the language(s) of instruction used by the teachers was low, there were some moments in which translanguaging (García, 2009) was registered, as can be seen in the overview of exemplary statements of the Function Categories in table 4. Teacher C1, for example, used Dutch to attract the Attention of her pupils and for Classroom Management (examples 1 and 2). Teacher R1 involved the home languages of his pupils by using some words he had learned in Tigrinya for the functions Comprehension and Feedback (examples 3 and 7). He also used some Frisian (example 9) for the function Knowledge. Teacher D1 used North Frisian in the dialect activity to provide Knowledge (example 10). He furthermore used Dutch for Comprehension (example 4) and as expression utterance in Feedback (example 8). The function Identity was barely used and in none of the utterances in this category translanguaging was used.

4.2.3 Examples of pedagogical translanguaging

A discussion of two exemplary transcripts of pedagogical translanguaging at schools R and C follows. Table 5 shows an example of translanguaging in school R. For the *Find the way* activity, teacher R1 wrote the words for ‘right’, ‘left’ and

‘straight’ in Dutch and Tigrinya on the board with help from the students. In the excerpt, he wants to add the Arabic words on the board and uses the home language of the student to repeat them. In this example, R1 used the home language of the student to include all home languages of his pupils and thus assure their participation in the activity.

Table 5: Example of translanguaging from school R

Actor	Utterance (Dutch and <u>Arabic</u>)	English translation
R1	Ehm Arabisch rechtsaf [name of student] rechtsaf	<i>Ehm Arabic right [name of student] right</i>
S1	Yamin.	<i>Right.</i>
R1	<u>Yamin</u> ? Dat lijkt heel veel op Tigrinya	<i>Right? That is very similar to Tigrinya</i>
R1	Nou dan is bij jullie <u>sichiem</u> ofzo.	<i>Well then you have something like sichiem.</i>
		<i>(in Tigrinya, segam means left)</i>
S1	Ja	<i>Yes.</i>
R1	Ja?	<i>Yes?</i>
S1	Eh rechts?	<i>Eh right?</i>
R1	Nee nu links	<i>No now left.</i>
R1	Wat is links?	<i>What is left?</i>
S1	Links <u>yamin</u> .	<i>Left right.</i>
S1	<u>Yamin</u> .	<i>Right.</i>
R1	Yamin nee rechts is <u>yamin</u> .	<i>Right no right is right.</i>
S1	Links eh <u>yesar</u> .	<i>Left eh left.</i>
R1	<u>Yasar</u> ?	<i>Left?</i>
S1	<u>Yesar</u> .	<i>Left.</i>
S1	<u>Yesar</u> ja.	<i>Left yes.</i>
R1	<u>Yesar</u> .	<i>Left.</i>
S1	Links <u>yesad</u> .	<i>Left left.</i>
R1	<u>Yesad</u> ja schrijf jij maar even waarom sta ik een beetje moeilijk te doen hier.	<i>Left yes you write it down why am I being difficult here.</i>
S1	<u>Yesad</u> .	<i>Left.</i>
R1	<u>Yesad</u> maar in ieder geval Tigrinya wisten jullie dat het Tigrinya Arabisch lijkt op elkaar of is eigenlijk hetzelfde woord.	<i>Left but anyway Tigrinya did you know that Tigrinya Arabic is similar or is actually the same word.</i>
S1	Ja.	<i>Yes.</i>
R1	<u>Yesar</u> ehm en rechtdoor rechtdoor.	<i>Left ehm and straight straight.</i>
R1	Schrijf die ook maar even op rechtdoor.	<i>Write that one down too straight.</i>
R1	Rechtdoor rechtdoor.	<i>Straight straight.</i>
R1	Dankjewel, <u>atoll</u> .	<i>Thank you, straight.</i>

Table 6 displays a translanguaging excerpt in school C. For the *Dialect* activity teacher C1 has shown a short video of a comedian who discussed dialects and C1 discusses this in Frisian. She asks the students for feedback in Frisian, but switches to Dutch as a student answers in Dutch. The example demonstrates that the teacher’s translanguaging between Dutch and Frisian was not always related to the language use of her pupil since she would sometimes do this spontaneously. It was also not the case that the teacher always switched to Dutch when a student answered or asked a question in Dutch. However, the teacher’s translanguaging between Frisian and Dutch seemed to be more dependent on the specific pupil. Generally, when the teacher seemed to know a pupil’s level of Frisian was insufficient, she used Dutch, but when she knew the pupil would be able to understand her, she remained in Frisian.

Table 6: Example of translanguaging from school C

Actor	Utterance (Dutch and Frisian)	English translation
C1	Ehm dit is Jochem Myjer en Jochem Myjer dy docht wat dialekten foar Jochem Myjer dy eh no ja dy dy hat miskien wat in eh ja wat fine jim derfan wat fine jim derfan.	<i>Ehm this is Jochem Myjer and Jochem Myjer he demonstrates some dialects Jochem Myjer he eh well he he maybe has a kind of eh yes what do you think about what do you think about it.</i>
S	Grappig.	Funny.
C1	Benijd wat fynsto?	Curious what do you think?
S1	Grappig.	Funny.
C1	En wat fynst presys grappich?	And what exactly do you think is funny?
S1	Hoe die het eh uitspreekt.	How he eh pronounces it.
C1	Dat is leuk hen ja ik fyn it ek wol eh..	It's nice right yes I also think it's eh..
S2	Het Amsterdamse accent klopt helemaal niet.	The Amsterdam accent is not right at all.
C1	Nee hen?	It's not, right.
S2	Nee ik heb nog nooit zo gepraat.	No I have never talked like that.
C1	Nee ik heb ook niet het gevoel dat ik praat alsof ik de hele dag in m'n billen wordt geknepen dat heb ik ook niet dat gevoel maar het kan best zijn dat het voor een ander wel zo eh zo klinkt.	No I also don't feel like I talk like I'm being pinched in my bottom all the day I also don't feel like that but it is possible that for another it does eh sound like that.

As far as language use goes, the results discussed in this section show that teachers from schools R and D primarily spoke in the language of instruction throughout the lesson, translanguaging here and there to another language for different functions. The teacher from school C did translanguage between the instructional language Frisian and Dutch throughout the lesson. The type of activity seemed to be influential in whether teachers adopted a more multilingual habitus. For example, the activities that teacher R1 performed allowed room for translanguaging between Dutch and Arabic. The type of subject, language or content, was also influential. The dia-

lect lesson for example, as given by teacher C1, allowed for lots of interaction and for translanguaging, compared to the dialect lesson given by teacher D1 was much more teacher-pupil directed and allowed for less translanguaging. Finally, language use also depended on the type of pupils. Teacher C1 taught mainly Dutch-speaking pupils whereas teacher D1 taught mainly Frisian-speaking pupils, which took away the need to translanguage to Dutch as was necessary for teacher C1. The teachers at school R taught pupils from very different language backgrounds (e.g. Arabic, Tigrinya, Chinese) through Dutch and would use translanguaging as a leverage to pupils' home language or Frisian.

The use of different language functions also shows a division between the schools. Whereas the teachers at schools R and C use Attention, Explanation and Feedback most, the teacher at school D uses Explanation, Feedback and Knowledge most. Comprehension was only used for a small percentage of the time (3-10 %) and finally, Identity was only used by the teachers at school R, for only 0.7 % of the time.

4.3 Implications for teacher training programmes

The project was evaluated through interviews with participating teachers and questionnaires with pre-service teachers. Most teachers were positive about the holistic approach to multilingualism in education and claimed it was very helpful to them in incorporating different multilingual approaches in their lessons. However, what they gained from the project did depend on the type of school. The teacher at school C, where many pupils struggle with negative attitudes towards the Frisian language, mentioned that her students now “have more respect for people who speak Frisian. They better understand why people choose to speak a dialect (or Frisian) and in which kinds of situations they do.” The teacher from school D claimed that his pupils had “learned more about the relation between languages.” One of the teachers from school R claimed that his pupils had “experienced that their own language is also important in acquiring a new language.”

As part of the current teacher training program at our university of applied sciences we work with design-based education (DBE). DBE aims to train students to become entrepreneurial, resourceful and world-wise professionals. DBE is an innovative education concept in which valuable elements from the competence-oriented and problem-based education used. As an assignment for a so-called DBE-atelier two groups of five 1st-year pre-service secondary education teachers from different fields (language and content subjects) were asked to develop multilingual activities that combined different languages in content subject teaching. The evaluations of their experiences showed that the pre-service teachers were

happy to get the opportunity to work together with peers from different fields and with multilingualism experts so early in their careers. They claimed to have learned a lot about the different approaches to incorporate multilingualism in the classroom. Pre-service teachers from content subjects claimed they became aware of the importance of languages within non-language subjects. Others claimed to have learned about the importance of allowing different home languages (e.g. Frisian, Arabic) in her Dutch classroom as it “can actually improve the performance of the pupils. They understand things better.” A pre-service teacher of English claimed to have learned that “even when teaching a language like English, there are many ways to integrate multilingualism.”

What these evaluations show us is that if we wish to train teachers for today’s multilingual and multicultural classrooms, we should move away from language separation ideologies and incorporate multilingual approaches right from the start of teacher training programmes. This would allow pre-service teachers to acknowledge and use foreign, national, regional minority and migrant languages within mainstream classes in both language and content subjects straight away in their pedagogical practices.

5 Discussion

The aims of this article were to 1) present and discuss an intervention of holistic multilingual secondary education and its translation into pedagogical activities, 2) to zoom in on its effects at the interactional level by focusing on moments in which different functions of pedagogical translanguaging (García & Wei, 2015) were recorded and 3) discuss the possible implementations for teacher training programmes. For this, examples of activities developed for three types of schools were used to discuss how the holistic model for multilingualism in education can be translated into practice. The examples showed how teachers can use home languages of their pupils as a lever to learn Dutch and to increase language awareness through an activity on dialects spoken in the Netherlands. They furthermore exemplify the different ways in which teachers interpreted the holistic model for multilingualism in education (Duarte, 2017) in order to combine elements of different approaches to develop their own tailored activities. The model thus provides an orientation in relation to the several aims and forms of including multiple languages in secondary education and allows for a combination of different approaches to serve specific aims. Through joint design-based development (McKenney & Reeves, 2013) and small-scale experimenting, teachers growingly became experts in the different approaches and, more importantly, in operationalising how these could be included in their everyday pedagogical practices.

In addition, transcriptions of videographic classroom observations were used to illustrate classroom interaction at the schools while they were implementing the developed activities. Language use before implementation or in a control group was, however, not recorded. The results clearly showed differences between the three schools. The activities developed within the Holi-Frysk project did encourage teachers to include other languages in their classrooms, but this was not always reflected in their own language practices, but rather in the topics they chose to address and the ways in which they invited their students to use their languages or reflect on issues directly related to multilingualism. In interactional terms, the implementation of a multilingual approach does not necessarily increase the number of languages teachers use, but rather what they do with the different languages of instruction and their pupils' home languages.

The teachers at schools R and D almost completely taught in the language of instruction of the particular lesson. At school R, even when students' proficiency in the Dutch language of instruction was limited, the teachers still provided and asked for feedback in Dutch. The few occasions during which home languages were used (only by teacher R1), they were used for Feedback, and otherwise for Comprehension or Explanation. The teacher would for example repeat single words the students had said and in some lessons the home languages were actively included and used by the teacher (for example in the activities 'Multilingual mathematics' and 'Find the way'). Occasionally, words in home languages were written on the board in order to be compared to other languages or to be referred to later on. When Frisian was used, this was mostly to convey Knowledge, and when foreign languages were used, they most frequently had a Comprehension function. When teachers used another language than Dutch as in school R, the function for which it was used dependent on the type of language (regional, foreign or home language). In school D, the teacher spoke Frisian almost exclusively in the observed (Frisian) lessons. He used North Frisian only to illustrate similarities and differences between Standard Frisian and North Frisian and Dutch for the functions Comprehension and Feedback. Although they are very different types of schools, schools R and D both seem to be exercising a typical monolingual habitus (Gogolin, 1994), since the teachers were consistent in their use of the majority language without using other languages to communicate with the students. However, depending on the type of pupil, the subject and the activity, the teachers sometimes did adopt a more multilingual habitus.

One of the drawbacks of the study was that there were not classroom observations of all teachers involved. This would have provided more information on the classroom interaction in other subjects than Frisian, at schools C and D. In addition, a control group and/or pre-post video observations in all classes would have been needed in order to document longitudinal changes in the interaction and the functional use of several languages by the teachers.

6 Conclusion and implications

The holistic model for multilingual secondary education has just finished its piloting phase. As such, it is still too soon to draw any conclusions on its effectiveness. However, some preliminary remarks can be made based on the data provided here.

The Holi-Frysk project has shown that different types of secondary schools use different languages and language combinations to fulfil different pedagogical functions and has mapped new functions for which teachers engage in translanguaging. Whereas previous studies have found that teachers translanguange to ensure safety and understanding and valorise home languages (De Jong, 2015; Marawu, 2018), this study revealed that teachers engage in translanguaging practices to provide and ask for feedback as well as to draw students' attention and organise the classroom. It also suggests that teachers' valorisation of home languages and their way of strengthening students' identity might be more implicit and cannot be measured appropriately by investigating teachers' explicit language use alone. In line with the work by Conteh and Meier (2014), future research should therefore continue to focus on the more implicit ways in which teachers develop pedagogical activities to engage with pupils' multilingualism at different levels and not only as reflected in their own language practices.

We can carefully conclude that it takes time and experimenting in teams for the model to be translated into everyday pedagogical practices. We are however positive about these preliminary results as we have noticed the growing openness of participating (pre-service) teachers to reflect on their multilingual practices in order to enhance the learning process of their pupils. More research on implementation and effectiveness of the model and its integration in the teacher training programme will be conducted in the follow-up of this pilot which will run for two years and in which 6 secondary schools and new groups of pre-service teachers participate.

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